## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) A method for inducing differentiation of pluripotent cells comprising the following steps (a) and (b):
  - (a) culturing the pluripotent cells in a medium comprising any one of the following a combination of growth factors selected from the group consisting of (i) to (iii):
    - (i) acidic fibroblast growth factor, fibroblast growth factor 4, and hepatocyte growth factor;
    - (ii) acidic fibroblast growth factor, and growth factor(s) selected from activin A, epidermal growth factor, and  $\beta$ -nerve growth factor; and
    - (iii) fibroblast growth factor 4, and growth factor(s) selected from activin A and hepatocyte growth factor; and,
  - (b) culturing the cell cultured in step (a) in a medium comprising oncostatin M, and
  - (c) thereby inducing differentiation of the pluripotent cells into hepatocytes,

wherein the pluripotent cells are selected from the group consisting of embryonic stem cells and mesenchymal stem cells.

- 2. (Currently Amended) The method according to claim 1, wherein a gelatin-coated culture dish is used the cells are cultured on a gelatin-coated culture dish in step (a), and a collagen type I coated culture dish or laminin-coated culture dish is used the cells are cultured on a collagen type I-coated culture dish or laminin-coated culture dish in step (b).
- 3. (Currently Amended) The method according to claim 1, wherein a gelatin-coated culture dish is used the cells are cultured on a gelatin-coated culture dish.
- 4. (Currently Amended) A method for inducing differentiation of pluripotent cells comprising the following steps (a) and (b):

Appl. No. 10/789,159 Amdt. dated July 19, 2007

Reply to Office Action of April 25, 2007

- (a) culturing the pluripotent cells in a medium comprising at least one growth factor selected from retinoic acid, leukemia inhibitory factor, and hepatocyte growth factor; and,
- (b) culturing the cell cultured in step (a) in a medium comprising any one of the following a combination of growth factors selected from the group consisting of (i) to (iii):
  - (i) acidic fibroblast growth factor, fibroblast growth factor 4, and hepatocyte growth factor;
  - (ii) acidic fibroblast growth factor, and growth factor(s) selected from activin A, epidermal growth factor and  $\beta$ -nerve growth factor; and
  - (iii) fibroblast growth factor 4, and growth factor(s) selected from activin A and hepatocyte growth factor, and
  - (c) thereby inducing differentiation of the pluripotent cells into hepatocytes.
- 5. (Currently Amended) The method according to claim 3, wherein a gelatin coated culture dish is used the cells are cultured on a gelatin-coated culture dish in steps (a) and (b).
- 6. (Currently Amended) A method for inducing differentiation of pluripotent cells comprising the following steps (a) to (c):
  - (a) culturing the pluripotent cells in a medium comprising at least one of the growth factors selected from retinoic acid, leukemia inhibitory factor and hepatocyte growth factor;
  - (b) culturing the cell cultured in step (a) in a medium comprising any one of the following a combination of growth factors selected from the group consisting of (i) to (iii):
    - (i) acidic fibroblast growth factor, fibroblast growth factor 4 and hepatocyte growth factor;
    - (ii) acidic fibroblast growth factor, and growth factor(s) selected from activin A, epidermal growth factor and  $\beta$ -nerve growth factor; and
    - (iii) fibroblast growth factor 4, and growth factor(s) selected from activin A and hepatocyte growth factor; and,

Appl. No. 10/789,159 Amdt. dated July 19, 2007 Reply to Office Action of April 25, 2007

- (c) culturing the cells cultured in step (b) in a medium comprising oncostatin M, and (d) thereby inducing differentiation of the pluripotent cells into hepatocytes.
- 7. (Currently Amended) The method according to claim 6, wherein a gelatin-coated culture dish is used the cells are cultured on a gelatin-coated culture dish in steps (a) and (b), and a collagen type I coated culture dish or laminin-coated culture dish is used the cells are cultured on a collagen type I-coated culture dish or laminin-coated culture dish in step (c).
- 8. (Previously presented) A method according to claim 1, wherein the pluripotent cells are derived from a mammal.
- 9. (Original) The method according to claim 8, wherein the mammal is a human, monkey, mouse, rat or pig.
  - 10. (Cancelled)
- 11. (Previously presented) A method for producing hepatocytes, wherein the method comprises steps (a) and (b) according to claim 1, or steps (a) to (c) according to claim 6.
- 12. (Original) The method according to claim 11, wherein the hepatocytes are mature hepatocytes.
- 13. (Previously presented) The method according to claim 11, wherein the pluripotent cells are derived from a mammal.
- 14. (Original) The method according to claim 13, wherein the mammal is a human, monkey, mouse, rat or pig.

## 15-21. (Cancelled)

22. (New) The method of claims 1, 4, or 6, wherein the hepatocytes are mature hepatocytes.